

REMARKS

Claims 1-30 were pending. Claims 1-30 have been rejected. Claims 1, 8, 11, 18, 21, and 28 have been amended.

Claim Rejections - 35 USC § 112

Claims 1-7, 11-17 and 21-27 were rejected under 35 U.S.C. § 112, first paragraph for failing to comply with the written description requirement. In particular the examiner rejected claims 1, 11 and 21 for reciting the limitation of "grouping non-missing data elements into n layers", and not disclosing this limitation in the specification. Claims 2-7, 12-17 and 22-27 were rejected for being dependent upon a rejected base claim.

The applicant respectfully disagrees with the examiner's rejection of claims 1, 11 and 21. The limitation cited by the examiner is disclosed in the applicant's specification at least on page 2, lines 20-21. Thus claims 1-7, 11-17 and 21-27 are allowable at least under 35 U.S.C. § 112.

Claim Rejections - 35 USC § 102

Claims 1-2, 4-12, 14-22 and 24-30 were rejected under 35 U.S.C. § 102(e) as being anticipated by US Patent Application No. 6,636,565 issued to Eung Tae KIM (hereinafter Kim).

Kim discloses a method for concealing error (Kim, Title). Moving picture information is transmitted via a limited bandwidth channel (Kim, column 1, lines 12-15). Moving picture standards define re-synchronization procedures that are performed in units of a slice (Kim, column 1, lines 15-18). Each slice consists of a plurality of macro blocks (Kim, column 1, lines 18-19). When an error is generated in a slice, all information in the slice with the error is lost (Kim, column 1, lines 21-23).

The applicant has amended claims 1, 8, 11, 18, 21, and 28 to clarify that they recite that the n layers are nested layers. Support for this amendment can be found at least in FIG. 1. Please note that it is the intention of the applicant that the scope of the claims include methods directed towards higher and lower dimensional data as recited on page 18, lines 19-20, while still retaining the nested nature disclosed in the 2-dimensional example shown in FIG. 1.

The position of the examiner appears to be that the term 'slice' as disclosed by Kim reads on the term 'layer' as recited in claim 1. As discussed above the claims have been amended to clarify their scope and to distinguish them from the prior art. The term slice as used by Kim does not suggest or disclose grouping data into nested layers. Nor is Kim amenable to incorporating all the features recited in the claims as currently amended, at least because Kim teaches away from these features. Kim teaches that 16x16 macroblocks are divided into four 8x8 blocks (Kim, column 7, lines 11-14). As shown in FIG. 5 of Kim, these are neighboring blocks and are not amenable to nesting as recited in the claims. This is an additional reason as to why claim 1 is allowable over the cited art. This is also, an additional reason as to why claims 8, 18, and 28 are allowable over the cited art.

The examiner has indicated that steps S2, S3, S9 and S10 of Kim's FIG. 6 disclose step (c)(2) recited in claim 1. The applicant respectfully disagrees with the examiner's interpretation of Kim. Steps S2 and S3 do not provide thresholding as suggested by the Examiner. Kim does not threshold select transform coefficients as recited in claim 1, instead Kim compares a difference value, a mean value and a variance value to various values which Kim refers to as thresholds and then decides between temporal predication error concealing or spatial predication error concealing methods based on the result of those comparisons (Kim, column 4, lines 53-58, column 5, lines 6-10 and FIG. 6). Thus, Kim does not suggest or disclose all of the features recited in claim 1. This is an additional reason as to why claim 1 is allowable over the cited art.

The examiner has indicated that equation 5 in combination with the 16x16 matrix disclosed in column 3, lines 46-48 provide a selection matrix which is equivalent to constructing a selection matrix using a set of transform coefficients. The applicant has defined a selection matrix on page 7, line 16 to page 8, line 3 of the specification as collection of elements that indicate which coefficients are kept and which coefficients are hard-thresholded. Kim does not suggest a selection matrix as defined by the applicant. Instead Kim discloses dividing a picture into macroblocks (Kim, column 3, lines 46-48) and a method for calculating the coefficients of a linear predictor based on average values of neighboring macroblocks (Kim, column 6, lines 13-33). Thus, Kim does not suggest or disclose a

selection matrix as suggested by the examiner. This is an additional reason as to why claim 1 is allowable over the cited art.

The examiner has suggested that equation 6 disclosed by Kim is equivalent to constructing a system of linear equations based on the selection matrix as recited in element (c)(4) of claim 1. The applicant respectfully disagrees with this interpretation of Kim. Equation (6) merely defines the elements recited in equation (5) and is not based on a selection matrix. Nor is there any disclosure or suggestion that the equations in equation (6) are based on a matrix of any kind let alone a selection matrix. This is an additional reason as to why claim 1 is allowable over the cited art.

Claims 11 and 21 are allowable for substantially the same reasons as claim 1. Claims 2-7, 9-10, 12-17, 19-21, 22-27, and 29-30 are allowable at least because they are dependent upon allowable base claims.

In view of the foregoing, it is respectfully submitted that all pending claims are patentably distinguishable over the documents of record, and that the application is in condition for allowance. Should the Examiner believe that any issues remain outstanding, he is respectfully requested to contact applicant's undersigned agent in an effort to resolve such issue(s) and advance the case to grant.

Respectfully submitted,

/Daniel A. Ratoff/

Daniel A. Ratoff

Patent Agent

Registration No. 54,389

Please address all correspondence to:

Epson Research and Development, Inc.
Intellectual Property Department
2580 Orchard Parkway, Suite 225
San Jose, CA 95131
Phone: (408) 952-6030
Facsimile: (408) 954-9058
Customer No. 20178

Date: April 6, 2007